



**Langley Research Center**

**LAPG 1046.1**

**Effective Date: January 15, 2003**  
**Expiration Date: January 15, 2008**

## **NASA LANGLEY RESEARCH CENTER EMERGENCY PLAN**

**National Aeronautics and Space Administration**



**Langley Research Center  
DIRECTIVES MANAGEMENT  
TRANSMITTAL SHEET**

**LAPG 1046.1**

**January 15, 2003**

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**MATERIAL TRANSMITTED**

LAPG 1046.1, "NASA Langley Research Center Emergency Plan."

**CANCELLATION**

LAPG 1046.1, dated August 11, 2000

**SUMMARY**

This directive has been revised to:

- Change the Emergency Preparedness Officer review of the Plan to annually (in Chapter 2).
- Add Chapter 5, "Weapons of Mass Destruction and Terrorism Planning."
- Reformat Preface to comply with NPG 1400.1, "NASA Directives System Procedures and Guidelines."
- Update prescribing documents and organizations.
- Remove Annex D, Enclosure 1, "Emergency Alerting System Contacts."
- Update time and attendance procedures in Annex D, Enclosure 3, "Sample Announcements," which are required by WebTADS.

**Responsible Office: Office of Safety and Mission Assurance****PREFACE****P.1 PURPOSE**

This NASA Langley Research Center (LaRC) Emergency Plan consists of a Basic Plan with anticipated hazards and accompanying Annexes which outline disaster preparedness, planning and operations. The Basic Plan contains information and instructions that are applicable to all Annexes. Annexes contain instructions for specific situations and will be updated as appropriate. Annexes A, F, G, M, N, O, R, S, and U delineated in NASA Procedure and Guidance (NPG) 8715.2, "NASA Emergency Preparedness Plan Procedures and Guidelines," are not applicable to LaRC and have been omitted from this Plan. The Emergency Plan comprises one section of the LaRC Emergency Preparedness Manual.

The LaRC Emergency Plan meets the requirements of NASA Policy Directive (NPD) 8710.1, "Emergency Preparedness Program," NPG 8715.2, and reflects agreements with Langley Air Force Base management.

The plan is intended for planning purposes upon receipt and will be executed the Deputy Director's direction as situations may require.

Primary responsibility for the LaRC Emergency Plan rests with the Emergency Preparedness Officer.

**P.2 APPLICABILITY**

The requirements of the plan apply to all NASA and non-NASA personnel (contractor, general public, or other governmental agencies) utilizing LaRC facilities or visiting the premises of this Center. In the event of an emergency, non-NASA personnel will be subject to the direction and control of the proper LaRC authority to the same extent as will Center employees. All persons will receive the same signal warning of the imminent danger, be advised of the hazards and evacuation opportunities, and be offered refuge.

**P.3 AUTHORITY**

- Executive Order (EO) 12656, "Assignment of Emergency Preparedness Responsibilities," November 18, 1988.
- Federal Preparedness Circular (FPC) 6, "Emergency Succession to Key Positions of Federal Departments and Agencies," May 3, 1984.
- Federal Emergency Management Agency, "Federal Response Plan," April 1999.

- Federal Emergency Management Agency, "National Mitigation Strategy," October 8, 1996.

#### **P.4 REFERENCES**

- NPD 8621.1, "NASA Mishap Reporting and Investigating Policy."
- NPD 8710.1, "Emergency Preparedness Program."
- NPD 8710.2, "NASA Safety and Health Program Policy."
- NPG 1000.3, "The NASA Organization."
- NPG 1620.1, "Security Procedures and Guidelines."
- NPG 8621.1, "NASA Procedures and Guidelines for Mishap Reporting, Investigating, and Recordkeeping."
- LAPD 3630.3, "Time and Attendance."
- LAPG 1040.2, "LaRC Duty Officer's Handbook."
- LAPG 8800.1, "Environmental Program Manual."
- Interservice Support Agreement, NASA Langley Research Center and 1st Fighter Wing, Air Combat Command (ACC), Langley Air Force Base.

#### **P.5 CANCELLATION**

LAPG 1046.1, dated August 11, 2000, and should be destroyed.

Delma C. Freeman, Jr.  
Deputy Director

#### **DISTRIBUTION:**

LaRC Emergency Preparedness Manual Holders  
(Distribution controlled by Office of Safety and Facility Assurance, OSMA)  
SDL 410 - Facility Coordinators  
SDL 412 - Facility Safety Heads  
429/Office of Safety and Facility Assurance, OSMA (10 copies)

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## Chapter 1

### BASIC PLAN

#### 1.1 TASK ORGANIZATION

- All LaRC staff organization elements
- Air Force Liaison Office
- Selected contractors

#### 1.2 SITUATION

##### 1.2.1 General

The Emergency Preparedness Officer (EPO) for LaRC is the Head, Office of Safety and Facility Assurance (OSFA), Office of Safety and Mission Assurance (OSMA) or the designated alternate. This individual has the responsibility for developing and maintaining plans, procedures, and capabilities necessary to ensure Center survival and effective operations under all kinds of emergencies. Current national defense policy requires the preparation of plans which will provide direction and assign responsibilities in the event of a national emergency. In addition to this requirement, there is a need to establish and implement plans which cope with a broad spectrum of local emergency situations that can arise with little advance warning. High water, heavy snowfall, and industrial explosions are examples of these types of emergency situations. Planning which seeks to provide for graduated appropriate response must be accomplished prior to an emergency in order that responsibilities can be assigned and individuals trained to react in accordance with approved procedures.

#### 1.3 PURPOSE

This Plan establishes the basis for the mitigation, preparedness, response and recovery from hazards or emergency situations.

- **Mitigation.** Mitigation involves taking action to reduce exposure to, probability of, or potential loss from an emergency. This plan identifies steps to address mitigation concerns during planning, response and recovery activities.
- **Preparedness.** While mitigation can make LaRC safer, it does not eliminate all potential risk or LaRC's vulnerability to hazards or emergencies. Preparedness involves establishing authorities and responsibilities for emergency actions in advance. This plan assigns responsibility to organizations and individuals for carrying out specific actions at projected times and places in an emergency that exceeds the capability or routine responsibility of any one organization, e.g., the fire department. The plan also sets forth lines of authority and organizational

relationships, and shows how all actions will be coordinated.

- **Response.** The onset of an emergency creates a need for time-sensitive actions to save lives and property, as well as for action to begin stabilizing the situation. This plan facilitates response by identifying required response actions and the resources available to carry them out. It also assigns roles and responsibilities for executing response actions.
- **Recovery.** Recovery is the effort to bring the Center to a normal operational status as quickly as possible after any type of disruption. This plan facilitates short-term recovery (which sets the stage for successful long-term recovery) by identifying personnel, equipment, facilities, supplies, and other resources available within the Center or by agreement with other organizations or jurisdictions for use during the response and recovery operations.

## 1.4 EXECUTION

### 1.4.1 Concept of Operations

This plan will be implemented in response to emergencies arising from natural or manmade disasters and incidents. In either event, a temporary emergency organization will be created, will remain functional under the direction of the Center Director, and will issue instructions in his name until normal operations can be resumed.

### 1.4.2 Tasks

Task assignments under this plan are spelled out in the following chapters and annexes. Staff members with no assigned duties will be contacted if their services are required. The annexes of this handbook summarize program elements and resources available to support the emergency preparedness actions.

## 1.5 ADMINISTRATION AND LOGISTICS

The head of each staff element assigned duties as indicated in this handbook will ensure that the necessary personnel are instructed and organized and procedures established to provide the support as directed.

## 1.6 DRILLS

Periodic drills and exercises will be conducted (no less than once per year). Response to an emergency or planning for an emergency such as the expected arrival of a hurricane may be substituted for a scheduled drill or exercise. Revisions

to the OSFA Work Instructions will be made as required based on “lessons learned” during debriefings with emergency responders, Facility Managers, and employees following such exercises or actual emergencies.

### 1.6.1 TRAINING & EXERCISES

OSMA will coordinate the training, scheduling, and conduct of NASA LaRC integrated emergency preparedness exercises with other NASA LaRC, Department of Defense (DOD), local, State, and Federal organizations involved in similar activities. OSFA will assure that emergency exercises minimize interference with ongoing NASA LaRC operations and maximize the benefits obtained from training. OSFA will assist in the scheduling of shared support resources, the development of exercise scenarios, planning and evaluations of exercises, disposition of action items, and dissemination of lessons learned. The EPO will lead all exercises.

A viable exercise program is an essential component of any effort to fully train emergency personnel on their duties and responsibilities when a disaster occurs. It is crucial that individuals who are charged with responding to emergencies are required to “experience” a disaster under conditions as realistic as possible before any actual event. The purpose of exercising is to improve the preparedness posture of the organizations involved. Such preparedness will result in the reduction of loss of life and property if a disaster occurs. To improve our capability to respond, and to exercise our plans, the following types of emergency exercise activities will be administered on NASA LaRC as planned by OSFA:

**Drill:** This type of exercise is used to practice a single activity, such as a facility evacuation, activation of Emergency Operations Center (EOC), or a timed fire response. It is normally used to develop skills, or to correct processes or procedures.

**Tabletop Exercise:** This is a nonstressful problem-solving exercise to work out details of generalized operations. It applies to multifunctional agencies or organizations and is an inexpensive way to exercise your plan and response elements.

**Functional Exercise:** Requires understanding of roles, responsibilities, and operations. Usually stressful; requires extensive preparation and a team approach for conduct and evaluation. It also involves direction and control functions, and some degree of EOC activation. Examples are: evaluating Incident Command, evaluating communications, evaluating rescue tactics and procedures, etc.

**Fullscale Exercise:** Requires extensive preparation and exercise team training. It is usually time sensitive and stressful. A fullscale exercise adds field response units to several previously evaluated functions. This type of exercise is the ultimate activity for preparing all elements to function in a real emergency or disaster.

## Chapter 2

### SNOW REMOVAL AND ICE CONTROL

#### 2.1 SITUATION

Langley Research Center (LaRC) is subject to occasional snow, sleet, or ice storms throughout the winter season, with the highest frequency normally occurring during the months of January and February. Snow and ice removal planning must consider air and ground temperatures and the direction the temperature is expected to move within the next few hours. Longer-range weather forecasts also influence the planning and the removal activity. The amount of sunlight that is expected to strike the area is another factor to be considered since it can be a natural help in removing snow and ice. A forecast of a warming trend turning to rain may help in removing snow and ice, but may become an ice hazard if the air temperature subsequently drops below the freezing point. The effectiveness of the local municipalities' snow removal efforts on roads leading to and from LaRC will be considered in planning snow and ice removal activities within the Center. These and other variables preclude the adoption of concrete criteria for commencing snow and ice removal or for closing the Center due to hazardous driving conditions. Each episode will be weighed at the time and under the conditions existing for that particular storm.

These unique weather conditions fortunately do not occur frequently. When such situations do develop, employees should call the NASA LaRC Special Announcement System (864-2111 or 1-888-664-2111) or in the event that the Center's Special Announcement System becomes inoperable, listen to local television and radio media for the latest information.

#### 2.2 OBJECTIVE

The primary objective of snow removal and ice control is to maintain employee/public safety and the operational status of the Center. Snow removal and ice control is performed by the Facilities and Equipment Support Services (FESS) contractor. The contractor's Snow Removal and Ice Control plan is reviewed and approved by the EPO annually. A current copy of the contractor's Snow Removal and Ice Control plan is included in the OSFA work instruction on snow removal and ice control. The most current copy of the OSFA work instruction is kept in the EOC, Facility 1162, Room 122.

#### 2.3 TASKS

##### 2.3.1 OSMA Weather Officer

During normal work hours, the OSMA Weather Officer will notify the EPO or his designated alternate of all threatening snowstorms or icing conditions. The information provided will include:

- Conditions to be expected.
- Forecast time of expected conditions.
- Expected severity.
- Expected duration.
- Prevailing wind direction and velocity.
- Anticipated ground conditions.

### **2.3.2 LaRC Duty Officer**

When heavy or unexpected night snowfall or severe ice conditions occur, notify the individuals listed in LAPG 1040.2, "LaRC Duty Officer's Handbook," to ensure removal operations are initiated.

### **2.3.3 Emergency Preparedness Officer**

The EPO shall conduct a snow removal and ice control tabletop exercise in December of each year.

At hours other than normal (day) shift, the EPO obtains the information listed in paragraph 2.3.1 by contacting numerous agencies. Phone numbers can be found in the OSMA Emergency Phone List.

- Langley Air Force Base (LAFB) Weather Forecaster
- LAFB Recorded Local Weather
- LAFB 1st Fighter Wing Command Post
- LAFB, HQ, Air Combat Command Center
- Hampton Police and Fire Information
- Newport News Police and Fire Information
- York County Sheriff Dispatcher
- Poquoson Police Department
- LaRC Fire Dispatcher
- OSMA Weather Officer

On receipt of weather information, the EPO will, as appropriate:

- Cause a survey to be made of Center streets.
- Direct initiation of snow removal actions as appropriate.
- Ascertain the operational status of LAFB.
- Determine the condition of key roads external to LaRC.
- If conditions warrant, review the situation with the Director, OSMA and telephone the Center Director, or as delegated, the Center Deputy Director, and:

- Report the probable storm strength and duration.
  - Report the operational status of LAFB.
  - Recommend action in respect to early dismissal of the shift at work and cancellation of other shifts until further notice.
  - Report plans to mobilize snow removal forces.
- Recommend opening the EOC in Facility 1162 if unusually severe conditions are predicted.
  - Convey any decisions and directives of the Center Director/Deputy Director to the appropriate agencies or LaRC organizations, if directed.
  - If work shifts are to be curtailed or terminated, contact the Head, Office of Public Affairs (OPA) as necessary to place the appropriate announcements on the LaRC Special Announcement System (see Annex D).

#### **2.3.4 Head, Infrastructure Management Branch, SEC**

The Head, Facility Systems, in coordination with the EPO, has the supervisory responsibility for snow removal and ice control operations at the Center, establishing clearing priorities, and revising those priorities as the need arises. The EPO establishes priorities.

#### **2.3.5 Contracting Officer's Technical Representative (COTR), FESS**

The COTR, FESS, has the operational responsibility for snow removal and ice control at LaRC. This individual will ensure the performance of the following tasks by the FESS Contractor.

- Prior to each winter season:
  - Procure and store sand, chemicals, and other abrasives suitable for ice control.
  - Prepare and maintain traffic directional signs and barricades to be used to control traffic during snow removal operations.
  - Inspect snow removal equipment, service it as required, and maintain a stock of spare parts.
  - As needed and depending on location, provide 5-foot stakes to mark fire hydrants, headwalls to culverts, or access roads which might be covered by drifting snow or by snowplow operations.
- When notified of threatening snow, sleet, or ice storms, organize available labor to ensure prompt snow removal operations.
- Inform the EPO of the progress of snow removal operations.
- Arrange for a vehicle (truck or wrecker type) to remove stalled vehicles if they

are an obstacle to traffic flow and clearing operations.

- Spread sand, chemicals, or other abrasives on ice-covered streets and sidewalks.
- Be prepared to issue sand, chemicals, or abrasives in small quantities (25-50 lbs.) to Facility Coordinators for use at facility entrances.

In the absence of other controlling factors, the priorities to be followed in clearing streets, sidewalks, taxiways, and parking areas are as follows:

A.	Fire Station	From Facility 1248 to cleared thoroughfare access with Langley Air Force Base (LAFB) by East Durand Street.	
B.	Dispensary	Emergency drive and entrance.	
C.	Heating Plant	From cleared thoroughfare to and around Facility 1215.	
D.	Main Thoroughfares	From Gate No. 4 to Gate No. 5 (Langley Boulevard) for use of emergency vehicles and security guards.	
E.	Handicap Ramps	See Ramp list (Disability Program Manager, (47718).	
F.	Motor Pool	Area adjacent to Facility 1199, for access to emergency vehicles, equipment, and service.	
G.	Warehouse	Off-loading area of Facility 1206.	
H.	Streets	From thoroughfares to LaRC facilities and parking lots.	
I.	Sidewalks	West area.	
J.	Facility Entrances	Clear steps and doorways.	
*K.	Taxiways and Ramps	Area adjacent to Facility 1244 (large emergency parking area).	
L.	Parking Lots	1. Facility 1219 area 2. Facility 1149 area 3. Facility 1209 area 4. Facility 1244 area 5. Facility 1230 area 6. Facility 1229 area 7. Facility 1232 area 8. Facility 1205 area	9. Facility 1212 area 10. Facility 1268 area 11. Facility 1251 area 12. Facility 1250 area 13. Facility 1202 area 14. Facility 1208 area 15. Facility 1299 area 16. Facility 1213 area

Continue clearing parking lots until all areas have been cleared. East area



parking lots will be cleared after LAFB clears thoroughfares.

\*Taxiways and flight operations ramps will take priority if it is ascertained that these are necessary for incoming or outgoing flights.

**NOTE: A current copy of the contractor's Snow Removal and Ice Control plan is included in the OSFA work instruction on snow removal and ice control. The most current copy of the OSFA work instruction is kept in the EOC, Facility 1162, Room 122.**

### **2.3.6 Emergency Dispatch Officer (EDO)**

The Emergency Dispatch Officer will be prepared to:

- Direct a survey of Center streets to determine the degree of hazard that exists.

### **2.3.7 Head, OPA**

The Head, OPA, in response to authorized instructions, will notify LaRC affected employees of the status of work shifts. (See Annex D for sample announcements.)

## **2.4 WEATHER CLOSING POLICY**

Center closure due to severe inclement weather is described in the following paragraphs. Weather, as we all know, is an unpredictable factor in our lives. While forecast accuracy has significantly improved in recent years, it is still not perfect. When weather conditions are likely to create hazardous driving conditions for employees, Center management collects information from local area law enforcement agencies regarding traffic and road conditions outside LaRC and surveys conditions inside LaRC. This information, evaluated with weather predictions, is used in determining whether the Center should continue normal operations. Then, as rapidly as possible, announcements are posted on the LaRC Special Announcement System.

The decision to cancel work shifts shall be predicated on safety considerations only. The degree of hazard resulting from snow or ice deposits will be evaluated with respect to the vehicle accident potential and danger to pedestrian traffic. The condition of off-Center streets and roads will be given proper consideration. The Center will be closed if:

- Key roads either internal or external to LaRC are: impassable due to snow or ice; passable only if necessary; or driveable only at 10 miles per hour.
- Parking lots are not driveable due to snow or ice or if people cannot walk

safely in them.

- Walkways are not walkable.

The decision to dismiss work shifts during the day shift hours will be transmitted through normal supervisory channels. Dismissal of work shifts on the second or third shift will be relayed to the Duty Officer by the EPO after having received instructions from the Center Director/Deputy. The Head, OPA, will be notified by the EPO to make public announcements if required. The principal method of employee notification, the LaRC Special Announcement System, telephone 864-2111, will be programmed accordingly.

The decision and announcement procedures are:

- Any decision to delay work hours or to close the Center will be made as early as possible, and except for unforeseen circumstances will be made prior to 5 a.m. on the day in question.
- A message announcing the decision will be placed on the LaRC Special Announcement System (864-2111 or 1-888-664-2111) by 5 a.m. This information will be provided to the media (television and radio) only if the NASA LaRC phone system is inoperable.
- Any delay in opening the Center will be announced by specifying the time of day that the Center is anticipated to open. Additionally, the time of the next announcement update will also be indicated. For example, "NASA Langley Research Center is closed for normal operations. It is anticipated that snow and ice removal activities will be sufficiently complete to allow the Center to re-open at 10 a.m. on Tuesday, December 2nd. The next scheduled update of the NASA LaRC Special Announcement System will be at approximately 9 a.m. on Tuesday, December 2nd."
- Decisions relative to the 2nd and 3rd shifts (if applicable) will be made on the affected day and will be posted on the LaRC Special Announcement System. These announcements will be made sufficiently in advance of the anticipated time of opening so that employees will have an ample amount of time to travel to the Center.
- If weather or road conditions change, a second decision concerning delayed work hours may be made, but no more than one change will be made on any day. For administrative leave purposes and to ensure equity for all employees, the Center utilizes a standard opening time of 8 a.m. when operations are interrupted by severe weather.
- Employees are responsible for monitoring the LaRC Special Announcement System (or local television and radio in the event that the

Center's Special Announcement System becomes inoperable) for changes to the Center's operational status. Employees not complying with announced changes to the Center's operational status will be charged appropriate leave to cover their absence.

## **2.5 COORDINATION**

If it appears likely that snow loads, ice loads, or drifting snow will damage roofs, power lines, or installed equipment, the Snow Removal Contractor will inform the EPO in order that the appropriate Organizational element may be brought to the site to take preventive or corrective action.

Snow removal operations will start when snow reaches a depth of 2 inches, unless the Snow Removal Contractor considers an earlier start advisable.

If the EPO determines that the EOC should be opened, it will be established at OSMA, Facility 1162, and will remain operational until closed by the EPO. Closing/reopening will be determined by the expected severity of the storm, the availability of labor to meet the demands, the coordination required to integrate LaRC organizational elements, and the estimated degree of hazard anticipated. Should it become necessary to maintain the EOC on an operational status beyond normal work hours, it will be manned until the situation subsides as directed by the EPO. In the event that significant information needs to be reported, and the EOC is not opened, contact the Emergency Dispatch Officer to relay the information.

## **2.6 ADMINISTRATION AND LOGISTICS**

### **2.6.1 Administration**

The EPO will be notified of any changes which will affect the implementation of this plan.

### **2.6.2 Logistics**

Certain emergency equipment is available for issue by contacting the Systems Engineering Competency (SEC). During a snow or ice emergency, or if one is anticipated in the immediate future, OSMA emergency response personnel are authorized to drive a Government emergency vehicle home in order to assist them to execute their emergency duties and/or allow them to return to LaRC to resume their emergency duties.

## **2.7 SUPERVISION AND SIGNAL**

### **2.7.1 Supervision**

The Snow Removal Contractor is in charge of all snow removal forces and equipment.

### **2.7.2 Signal**

The normal telephone communication will be used when possible. The Snow Removal Contractor may be contacted on the LaRC radio net.

## Chapter 3

### HURRICANES, TORNADOES, THUNDERSTORMS, AND HIGH WATER

#### 3.1 SITUATION

LaRC is located in an area in which hurricanes, tornadoes, severe thunderstorms, heavy rainfall, high water, and flooding can occur. The most important element in emergency preparedness for violent weather conditions is timely and adequate warning. Emergency measures can be initiated with confidence and executed with maximum thoroughness only when there is sufficient time available. (See Annex C for Center Warning/Alert conditions and Annex D for Contingency Communications.)

##### 3.1.1 Tornadoes and Thunderstorms

When conditions are favorable for severe weather to develop, the National Weather Service issues a severe thunderstorm or tornado **WATCH**. Weather Service personnel use information from weather radar, spotters, and other sources to issue severe thunderstorm and tornado **WARNINGS** for areas where severe weather is imminent. The warnings are passed on to local radio and television stations and are broadcast over local the National Oceanographic and Atmospheric Administration (NOAA) Emergency Alerting System serving the warned areas. These warnings are also relayed to local emergency management and public safety officials who can activate local warning systems to alert communities. Visible/audible warnings of oncoming tornadoes include:

- Dark, often greenish sky
- Large hail
- Wall cloud
- Loud roar-similar to a freight train

Tornadoes can occur anywhere at any time of the year. However, there are certain areas that favor tornado formation at different times of the year. Tornadoes may accompany tropical depressions and hurricanes that move over land. Tornadoes are most common to the right and ahead of the path of the storm center as it comes ashore.

**Tornadoes, Severe Thunderstorms** - (National Weather Service advisories.)

- (1) **Watch:** An announcement that conditions are favorable for the possibility of a tornado/severe thunderstorm occurring within a specified area and time period.
- (2) **Warning:** An announcement that a tornado/severe thunderstorm has been sighted and its expected path of travel is given.

## Tornado Shelter

The rapidity in which a tornado develops and approaches leaves little alternative but to seek the best nearby shelter. Interior hallways and lower levels of office facilities provide reasonably safe havens. In facilities without basements, seek cover under heavy furniture, workbenches, and so forth, located in the center of the structure. If caught in the open, it is better to use ditches, or culverts for shelter rather than attempting to move away from the tornado.

### 3.1.2 Hurricanes

The hurricane season begins on June 1 and ends November 30, with the highest number of incidents occurring in September and October.

Past experience has proven that a combination of high winds and high tides presents a considerable threat to low-lying areas and the structures located thereon. The threat from hurricane winds at LaRC is extremely serious. Winds of 75 mph or more by definition are categorized as hurricane velocity winds. The table below represents the Saffir Simpson Hurricane Scale, which classifies hurricanes based on their intensity.

#### CATEGORY AND EFFECTS OF HURRICANES\*

<u>Hurricane Category</u>	<u>Winds (MPH)</u>	<u>Surge (Ft.)</u>	<u>Typical Damage</u>
Tropical Storm	50-73	2-3	Trees, power lines, debris
1	74 - 95	4 - 5	Trees, power lines, non-anchored mobile homes
2	**96 - 110	6 - 8	Roofs, windows, considerable damage to vegetation and mobile homes, flooding
3	111 - 130	9 - 12	Mobile homes/beachfront homes destroyed, structural failures, flooding
4	131 - 155	13 - 18	Extensive building damage and destruction; major erosion of beaches, flooding
5	>155	>18	Complete roof and structural failures on residential and industrial buildings; major flooding, massive evacuation of all residential areas

\*Hurricane Levels are independent of Hurricane Categories. The predicted severity of a storm, however, should influence the EPO's decision at each Hurricane Level.

\*\*LaRC buildings are generally built to withstand 100-mph winds.

**Hurricane Conditions (Hurricane)** –LaRC uses a series of hurricane conditions. To provide consistency the hurricane levels are the same as those used by Langley Air Force Base (LAFB). The condition levels are based on the distance of 50-knot winds from the Center. The distance from the Center is predicted in hours and allows time to plan for the emergency. The Director, OSMA or the EPO may accelerate emergency response procedures (described in Annex J) if a more serious hurricane threatens the Center. To facilitate understanding and simplify communication, Hurricane levels are defined as follows:

- (1) **Hurricane 4:** Seventy-two hours prior to the arrival of 50-knot winds.
- (2) **Hurricane 3:** Forty-eight hours prior to the arrival of 50-knot winds.
- (3) **Hurricane 2:** Twenty-four hours prior to the arrival of 50-knot winds.
- (4) **Hurricane 1:** Twelve hours prior to the arrival of 50-knot winds.
- (5) **Hurricane Red:** Experiencing 50-knot or greater winds.
- (6) **All Clear:** Severe weather conditions have dissipated.

### **Hurricanes/High Water Shelter**

The more leisurely rate of movement of hurricanes provides time to assess the two elements of potential danger--wind velocities and tidal surge heights. Safe shelters for high tide only conditions are those of substantial construction sited at locations above the expected height of water.

#### **3.1.3 HIGH WATER**

High water often occurs during coastal storms, nor'easters, tropical storms and hurricanes. High water conditions exist any time water depths exceed 4 feet 6 inches above mean sea level, or whenever 6 inches or more rainfall precipitates over a 6 hour period at the Center. Flooding creates a danger from energized electrical circuits and may require that certain areas have electrical service discontinued. Response to high water and flooding is addressed Annex J.

A high tide alert will be given when a high tide of 4 feet 6 inches above mean sea level is anticipated. There are two flood conditions used to alert personnel to potential flooding. **FLOOD Condition 2** will be issued when the predicted tidal flooding will be up to 5 feet 6 inches above mean sea level. **FLOOD Condition 1** will be issued when predicted tidal flooding will be higher than 5 feet 6 inches above mean sea level.

During **FLOOD Condition 2**, personnel may remain in facilities. The parking lots and approach roads may become water covered but passable. Personnel should plan accordingly to ensure that vehicles are parked in an area that will not be flooded.

During **FLOOD Condition 1**, personnel are to vacate the East Area as approach roads will become impassable and preclude access to facilities by emergency response personnel and equipment. The EPO will determine the time to evacuate the East Area and when it is safe to return. The response team will determine what equipment will be safed prior to evacuating.

### 3.2 OBJECTIVES

- a. To establish protective measures and emergency procedures which will minimize hazards to personnel, and protect equipment and LaRC property from violent weather conditions.
- b. To restore the Center to full operational status as quickly as possible following abnormal weather.

### 3.3 TASKS

In the event of severe weather each Organizational Unit Manager listed below will designate a point of contact for coordination with the EPO throughout the duration of the emergency.

#### 3.3.1 LaRC Flight Service Office, Airborne Systems Competency (AirSC)

Giving due recognition to the limitations of the state of the art and the capriciousness of violent weather, warnings for weather phenomena shall be given during duty hours by the most expeditious means as follows:

Weather	Lead Time	Notify
Tornado	1/2 hour or as soon as sighted visually or on radarscope	Head, Aircraft Systems Branch (ASB), AirSC, EPO
Thunderstorms with or without hail	1 hour	Head, ASB, AirSC, EPO
Surface wind gusts equal to or greater than 50 knots	2 hours	Head, ASB, AirSC, EPO
Rainfall (2 inches or more within a continuous 12-hour period)	2 hours	EPO
Tides (4 feet 6 inches above mean sea level)	4 hours	EPO

**NOTE:** LAFB Weather Station issues severe weather warnings, weather advisories, and updates to show the progression of storms. The LAFB Consolidated Command Post notifies LaRC EDO of these severe weather conditions.



### **3.3.2 LaRC Duty Officer**

During second and third shift duty hours, be alert to changing weather conditions. Obtain the current forecast if concerned over the possibility of violent weather. If the forecast prediction falls within the criteria listed in the preceding paragraphs, contact the EPO immediately and report this information.

### **3.3.3 Head, Aircraft Support Branch, AirSC**

On receipt of advisory weather information from the LaRC Flight Service Office, take all steps necessary to protect aircraft from damage. This may include hanging or, if required, dispersal to other sites beyond the limits of the storm.

### **3.3.4 OSMA Weather Officer**

The Weather Officer continuously monitors weather conditions and keeps the EPO abreast of oncoming severe weather.

### **3.3.5 Emergency Preparedness Officer**

#### **a. Watches and Warnings**

The EPO will send a message to all personnel via email when we are under a tornado watch (tornado formation is possible). See Annex D, Center Contingency Communications.

If the watch is upgraded to a warning (tornado formation has been spotted), the EPO will activate the Center siren system for a 3-5 minutes--steady siren. Personnel will need to immediately take the following action. If in a trailer, take shelter in a permanent facility. If inside a building, stay inside away from windows and, if possible, move to the lower level of the building or to the basement. If caught in the open, take shelter in ditches, culverts, or low-lying areas.

Notify Organizational Unit Managers to ensure that all of their personnel are notified.

The EPO will signal an end to the warning with three short steady siren blasts.

The EPO will provide the Center Director/Deputy with status information as quickly as it becomes available.

#### **b. Flooding**

Upon notification by the EPO, the FESS contractor will be responsible for securing equipment and materials in the event of flooding. The contractor has a flood plan that indicates what equipment is most sensitive and which

buildings are most susceptible to flooding. This plan is executed for flash and tidal flooding and high water associated with hurricanes.

**NOTE: The most current copy of this plan is a part of the OSFA Work Instruction on Hurricanes, Tropical Storms, Nor'Easters, and Flooding and is kept in the EOC, Facility 1162, Room 122.**

**c. Hurricane--High Water**

With the announcement of Hurricon 3, the path of the storm will be closely followed for probable direction, intensity, and height of water. When Hurricon 1 is announced, contact the Center Director/Deputy, and:

- (1) Report the probable storm strength, direction, and the time that it was classified as Hurricon 1.
- (2) Report the operational status of LAFB.
- (3) Recommend action in respect to early dismissal of the shift at work and cancellation of other shifts until further notice.
- (4) Recommend the opening of the EOC if unusually severe conditions are predicted.
- (5) Direct the Head, OPA, to make the appropriate announcements (see Annex D).
- (6) Require that construction contractors working at the Center secure construction materials, scaffolding, and equipment that could cause damage if blown about by high winds.

**NOTE: For complete hurricane response, see the OSFA Work Instruction on Hurricanes, Tropical Storms, Nor'easters, and Flooding. The most current copy of the Work Instruction is kept in the EOC, Facility 1162, Room 122.**

**3.3.6 Facility Coordinators and Facility Safety Heads**

- a. Carefully inspect assigned facilities to determine the action required to provide protection from hurricanes and high water. Protective materials required to minimize damage, such as sandbags, plywood, and so forth, must be requisitioned. On receipt, these items must be stored in a secured area.
- b. With the declaration of Hurricon 2, Facility Coordinators will:
  - (1) Inventory equipment and material required to protect the facility against storm damage. Shortages should be made up without delay. Where materials are not stocked, local purchase procedures should be followed.

- (2) Inspect the facility for areas that may be vulnerable to storm damage as a result of current operations and protect accordingly.
- (3) Make plans to install protective materials in the event Hurricon 1 is declared.
- c. With the declaration of Hurricon 1, and as directed by the LaRC announcement, take all action necessary to provide maximum protection to the facility.

### **3.3.7 Head, Infrastructure Management Branch, SEC**

Provide assistance to Facility Coordinators as requested. When unusually severe conditions are predicted which will result in labor demands beyond existing Center capabilities, a request for additional contract services will be made through the Center Procurement Officer. Provide the work force required to:

- a. Keep the Center streets free and clear of fallen trees and other debris which may be hazardous to traffic.
- b. Remove and secure objects subject to displacement by high winds.
- c. Be prepared to provide damage control assistance should a facility be damaged.
- d. Furnish emergency transportation within the limits of available vehicles.
- e. On the declaration of Hurricon 2, cause a survey to be made of utilities for the purpose of providing protection to vulnerable areas and to ascertain that valves, switch gear, and so forth, are operable.
- f. With the declaration of Hurricon 1, make arrangements to have personnel available at all times to implement the procedures on electrical distribution switching and control of pressure systems as outlined in Annex J. Implementation will begin when directed by the EPO. Notification of completion shall be forwarded to the EPO when accomplished. In addition, be prepared to provide:
  - (1) Emergency work crews for damage control.
  - (2) Potable water after the cessation of the emergency.

### **3.3.8 Head, Office of Public Affairs**

The Head, OPA, shall:

- a. In response to authorized instructions, notify personnel of the status of work shifts at LaRC. (See Annex D for sample notices.)
- b. In the event of severe weather, be prepared to meet with the media to provide information.

### **3.3.9 Head, Office of Logistics Management**

Direct the issuance of equipment and supplies to Facility Coordinators to protect facilities.

### **3.3.10 Director, Office of Procurement**

Direct the procurement and be prepared to execute contracts for equipment, supplies, services, and protective materials on short notice.

### **3.3.11 Director, OSMA**

Directs the execution of this plan as the situation warrants, or as directed by the Center Director.

### **3.3.12 Security Office**

Be prepared to provide guard service to prevent illegal entry into damaged facilities. In the event of tornado damage, have guards posted to prevent unauthorized access. Request civil law enforcement assistance as required and be prepared to designate available LaRC employees as temporary guards.

## **3.4 COORDINATION**

The EOC, when opened, will be established at Facility 1162, and will remain operational until closed by the EPO. The decision to open the EOC will be predicated upon the expected severity of the emergency, the availability of manpower to meet the demands, the coordination required to integrate LaRC organizational elements, and the estimated degree of hazard anticipated.

## **3.5 CONTINUITY OF OPERATIONS**

If it is foreseen that the LaRC EOC will become untenable, operations will be shifted to an alternate facility. If time permits, this will be a phased relocation with the off-duty shift moving to the safer location, making preparations and assuming control from that site so that the personnel remaining in the primary EOC can evacuate.

### **3.6 ADMINISTRATION AND LOGISTICS**

#### **3.6.1 Administration**

The EPO will be notified of any changes that will affect the implementation of this plan.

#### **3.6.2 Logistics**

In the event roads become impassable to standard type vehicles, the OSMA will arrange for essential personnel to have access to Government vehicles that are suitable for the road conditions.

**Chapter 4****MAJOR ACCIDENTS OR EXPLOSIONS****4.1 SITUATION****4.1.1 General**

The diversity of research activities at LaRC, the uniqueness of much of the equipment, and the range of voltages, pressures, types of materials and gases employed, combine to make the Center vulnerable to uncontrolled events which could result in personnel injuries and significant loss of equipment. In addition, major damages may result from hostile military or paramilitary action and from natural catastrophes. Any of these misfortunes could demolish structures or cause severe injuries or death to a large number of employees. Research activities can result in accidents at some distance from the Center. Members of the public, as well as LaRC employees, may sustain injuries or death and private property may be damaged.

**4.1.2 Scope**

This chapter, with the exception of radiation mishaps, provides for the direction of a graduated response commensurate with the severity of the incident. The degree of implementation will be determined by the extent of injuries, damages or hazards. Provisions of this chapter will be selectively applied in Type A or Type B accidents (defined by NPG 8715.1, "NASA Safety And Health Handbook Occupational Safety and Health Programs"). Aviation mishaps are covered in LAPG 1710.9, "Aircraft Operations Manual," Appendix A, "Aviation Accident Reporting and Investigation Plan."

**4.1.3 Notification**

- a. **General**—The individual first having knowledge of the emergency and having the mobility to act, will report the situation to the following:

LaRC Emergency Dispatcher	On-Center	911
	Off-Center	864-5600
	Cell Phone	864-2222

The LaRC Emergency Dispatcher will then notify emergency response personnel using appropriate 911 notification procedures.

- b. **Aviation Accidents**—For aviation accidents, the LaRC Emergency Dispatcher receiving the notification will notify the Airborne Systems Competency (AirSC) and the Emergency Preparedness Officer.

## **4.2 MISSION**

Provide prompt, efficient rescue, care and treatment of persons injured in an emergency. Institute emergency measures required and appropriate to minimize further injury to personnel or damage to property.

## **4.3 TASKS**

### **4.3.1 NASA LaRC Fire Chief**

The NASA LaRC Fire Chief will immediately proceed to the site of the emergency and assume control and direction of all rescue operations. He will institute actions as necessary to minimize hazards to all personnel and limit damage to property and the environment.

### **4.3.2 Emergency Preparedness Officer**

The EPO will take charge of the Emergency Operations Center (EOC) and provide guidance to execute in an orderly fashion those actions required to provide prompt and effective means to minimize further injury and/or damage.

### **4.3.3 Director, Office of Safety and Mission Assurance**

The Director, OSMA, will direct the execution of this Chapter as the situation warrants or as directed by the Center Director.

### **4.3.4 Facilities Utilities Manager**

Develop and maintain procedures to cut power to the presently established facility power blocks in the event that an individual facility cannot be isolated from the power grid.

### **4.3.5 Security Office**

Provide guard services to control access to the scene of the disaster. Request appropriate law enforcement assistance as required, and pending arrival, designate available LaRC employees as temporary guards. Conduct investigations as warranted.

### **4.3.6 Office of Chief Counsel**

As requested by the EPO, send legal representatives to the scene of the accident to collect information to be used in the event of possible claims.

#### **4.3.7 Head, Office of Public Affairs**

Proceed to the scene to coordinate the release of information to the news media. No other individual shall be delegated the authority to issue statements to the press.

#### **4.3.8 Head, Office of Human Resources**

Notify next of kin of personnel seriously injured or killed as a result of the accident.

#### **4.3.9 Facility Coordinators**

Develop and execute procedures to secure high energy sources which may present a hazardous condition and show the location of main control switches, valves, or other control devices as applicable. These procedures will also be available to the LaRC Emergency Dispatcher and the Duty Office electronically. Coordinate the securing of utilities and control other hazards that will make a facility safe for rescue and recovery operations. The Facility Coordinator will report to the on-scene entry point and assist the incident commander with response activities.

### **4.4 COORDINATION**

The EOC will be opened as recommended by the EPO. The decision to open the EOC will be determined on a case-by-case basis. In the event it is activated, it will be located in Facility 1162, Room 122.

### **4.5 ADMINISTRATION AND LOGISTICS**

#### **4.5.1 Administration**

The EPO will be informed of any changes which will affect the implementation of this plan.

The Damage Assessment and Recovery Team will be appointed by the EPO and the on scene commander.

#### **4.5.2 Logistics**

**Mortuary** - Facility 1244 Annex, the Hangar, is designated as a temporary morgue where remains are to be held for identification. The establishment of this temporary morgue and its operation shall be under the direction of the NASA Fire Chief with the help of Occupational Health Services.



## Chapter 5

### WEAPONS OF MASS DESTRUCTION AND TERRORISM PLANNING

#### 5.1 SITUATION

Immediately following the terrorist attacks launched against the United States on September 11, 2001, NASA Langley Research Center took decisive action to better safeguard our employees, contractor personnel and infrastructure from such threats, and to ensure our continued ability to fulfill our mission. A major component of this effort is the augmentation of our emergency response capability to effectively deal with terrorist threats, including those that could potentially involve weapons of mass destruction (WMD). Weapons of Mass Destruction are a means used by terrorists to disable or terrorize mass numbers of persons. It is a violent act or an act dangerous to human life, in violation of the criminal laws of the United States or any segment to intimidate or coerce a government, the civilian population or any segment thereof, in furtherance of political or social objectives.

##### 5.1.1 General

Areas addressed by this chapter have been summarized below to familiarize our workforce with some of the specific actions that might be taken as part of an emergency response to a terrorist attack directed at or involving NASA Langley Research Center. This section seeks to help emergency responders confront the threat of a WMD and provide for the protection of the Center's personnel and facilities. This section covers the terrorist WMD threats, to include chemical, biological, nuclear (radiological - Annex L), incendiary, and explosive (Chapter 6.3 and Chapter 4).

A terrorist WMD incident/attack will require the response or assistance of numerous functional areas on our Center and outside agencies (e.g., FBI). This Chapter captures essential information designed to assist the incident commander (IC/ LaRC Fire Chief), Emergency Preparedness Officer (EPO), Safety Office, Security Office, and emergency responders in understanding each other's tasks, how they do their job, and how it all fits into the big picture of a terrorist WMD incident/attack response. Because of the innumerable factors presented for any given incident, only personnel with special knowledge and expertise must be deployed to carefully apply the presented procedures in order to achieve a desirable outcome.

This document provides only general details for responding to a WMD. Specific details are only provided to personnel on a need-to-know basis. For specifics, contact the Office of Safety and Facility Assurance.

##### 5.1.2 Notification

Any individual having knowledge of the emergency will report the situation to the following:

LaRC Emergency Dispatcher	On-Center	911
	Off-Center	864-5600
	Cell Phone	864-2222

The LaRC Emergency Dispatcher will notify emergency response personnel.

## **5.2 OBJECTIVE**

The purpose of this Chapter is to provide prompt, efficient rescue, care and treatment of persons injured in an emergency resulting from a WMD. It also provides procedures to institute appropriate emergency measures to minimize further injury to personnel or damage to property.

## **5.3 TASKS**

### **5.3.1 Initial Response Operational Task**

First responders must be vigilant during their travel to the scene and upon arrival. Responders should assume in every case that any suspected situation contains a fully functional WMD device and to treat it accordingly. Only specially trained and equipped explosive ordnance disposal personnel should approach or handle a suspected device. Extreme caution and a high degree of suspicion are required during the response to any terrorist WMD incident or attack.

The initial response phase begins with the first responders, who consist of firefighters, security forces, medical responders, and in some cases, Explosive Ordnance Disposal (EOD) personnel. These forces are typically first on the scene of the incident. First responders must approach the incident area with care to avoid becoming victims themselves. They must be cognizant of warning signs indicating the presence of lethal agents or potential hazards. In the case where hostile forces are present, the Senior Security Official will retain on-scene command until the threat is neutralized or until command is relinquished to civilian law enforcement agencies. The Senior Fire Official (SFO) or the Incident Commander (IC) determines the parameters of the incident site hot and warm zones, and provides command and control of the immediate incident site itself. Direct control of the hot zone may be delegated to another fire officer.

If WMD materials are suspected or detected, the IC will start appropriate notification and reporting requirements. If the Emergency Operations Center (EOC) is not already activated by this time, the Emergency Preparedness Officer (EPO) will activate the EOC.

Initial site incident response should be limited to the emergency responders. Severity of the incident may dictate that the incident command post (ICP) and EOC remain located some distance away.

Finally, Incident locations should be treated as crime scenes insofar as reasonably possible. The Security Office will maintain normal chain of custody procedures for any item that is removed from the incident scene.

### **5.3.2 Identify the Threat Agent**

First responders should have Hazmat agent detection capability that will allow them the ability to identify specific threats as rapidly as possible. Trained Industrial Hygienists (IH) personnel and response equipment should be available on short notice, including

after hours and weekends. First responders should attempt to identify agents used in the incident by employing on scene clues or any available testing kits. If test results are negative or ambiguous, on site IH personnel should employ more sensitive detection methods for an accurate threat assessment. Biological and unknown chemical agent samples in some instances will be taken by emergency responders and handed over to IH personnel for processing and identification. Specific chain of custody protocols, packaging, and marking requirements apply to all items removed from the scene. If the detection capability does not exist or is not adequate for the incident at hand, the EOC must determine other means or methods to identify substance (i.e., CDC, FEMA, Military, FBI).

### **5.3.3 Predict the Effects**

Hazard prediction should be conducted based on the type of agent identified and the weather conditions. These are critical factors to effectively predict the hazardous effects to personnel. The hazard prediction function should identify the hazardous material(s) at hand and incorporate such other functions as a hazard analysis (incorporating gas / liquid spill modeling), resource management, and emergency management.

### **5.3.4 Protect the Center**

If it is apparent that a WMD incident will affect a portion of the Center populace or local community, the EOC should initiate procedures to warn, advise, or evacuate personnel (see Annex E). The Senior Security Official should implement appropriate Force Protection Condition measures.

Every effort must be made to avoid further contamination of first responders and the Center populace.

### **5.3.5 Conduct Emergency Decontamination of Responders and Other Personnel**

The HAZMAT Team or Firefighters must establish a decontamination lane to process responders, contaminated casualties, and contaminated, but uninjured persons. All responders must remember that, if they are inside the cordon, they will be assumed as contaminated. All victims must be decontaminated before receiving any necessary medical treatment. The senior medical supervisor (head of triage) should set up a patient identification and tracking system. Information should be relayed to the receiving medical treatment facility(s) if a patient(s) in route is suspected of not being fully decontaminated at the incident site.

### **5.3.6 Recovery**

The recovery phase begins when the immediate hazards are contained. The FBI, Security Office, and Safety Office may delay this phase due to factors such as the extent and severity of the incident and ongoing investigation efforts. Depending upon the nature of the WMD incident/attack, extensive damage, mass casualties, and contaminated areas could result. FEMA can be called upon to support NASA in this recovery phase or Consequence Management. Significant recovery operations would no doubt be required, most likely involving considerable outside assistance.

### **5.3.7 Chemical Attacks**

#### **5.3.7.1 Immediate Impact**

Casualties may appear immediately, or symptoms may be delayed. Medical personnel may encounter an immediate spike in casualties that will overload their capabilities. There is a possibility that follow on casualties may not appear for a while, depending on the agent. Requirements would be immediate and massive, and casualty management would require a large and readily accessible antidote supply. Emergency response personnel will use appropriate documents as guides on how to handle the incident and treat victims and first responders.

#### **5.3.7.2 Long Term Impact**

*Reserved*

### **5.3.8 Biological Attacks**

#### **5.3.8.1 Immediate Impact**

If the type of pathogen is not quickly determined and medical treatment is not readily available, anticipate very large numbers of casualties. From the time of an attack to the incubation period, zero casualties would be reported to medical personnel for treatment. Depending on the agent used, a peak in casualties would take place within a few days (for anthrax), or up to two months (for brucellosis) and could quickly overload medical personnel and facilities. Emergency response personnel will use appropriate documents as guides on how to handle the incident and treat victims and first responders.

#### **5.3.8.2 Long Term Impact**

By the time it is determined that a biological attack has occurred; it might be too late for a vaccination to be effective for victims of primary exposure. This, coupled with the contagious and sometimes dormant nature of some agents, can lead to infections that would contribute to long-term consequences. The IC and EOC should be made aware of any intent by medical personnel to relocate biological casualties. Medical personnel should be aware that the IC and EOC must obtain approval for the movement of casualties with internationally quarantinable diseases through the appropriate lead agencies (FBI or CDC).

### **5.3.9 Radiological Attacks**

Radiation exposure can have both acute and long-term effects, requiring extensive medical treatment. Additional information for response to a radiological attack can be found in Annex L.

### **5.3.10 Explosive Attacks**

An explosive attack may occur with or without warning. Prior to the time of detonation, the incident will be treated as a bomb threat in accordance with Chapter 6.3. After detonation, the incident will be responded to in accordance with Chapter 4.

## **5.4 COORDINATION**

On-scene coordination during the incident response phase will be handled by the SFO or IC. The EPO will provide the necessary coordination between the SFO or IC and LaRC management.

The EOC will be opened as directed by the EPO. The decision to open the EOC will be determined on a case-by-case basis. Once activated, the EOC will be the coordination point for all activities not associated with on-scene emergency response.

All activities during the recovery phase will be coordinated by the Damage Assessment and Recovery Team. This team will be appointed by the EPO, SFO/IC, and the Center Director.

## **5.5 ADMINISTRATION AND LOGISTICS**

### **5.5.1 Administration**

The EPO will be informed of any changes that will affect the implementation of this plan.

### **5.5.2 Logistics**

A temporary mortuary will be setup, staffed and secured as needed based on the size, severity, and location of the incident.

The Director of Procurement will assign Procurement Officers to assist with purchasing necessary equipment and services as requested by the EPO. The Head of Office of Public Affairs will coordinate the release of information to the news media. No other individual shall be delegated the authority to issue statements to the press. Notification of next of kin of personnel seriously injured or killed as a result of the incident will be coordinated by the Head of Office of Human Resources.

## **5.6 DUTIES AND RESPONSIBILITIES**

The IC and EPO have inherent authority to maintain order, safety, and control of the incident until the area has been deemed safe for resumption of normal business. The Federal Bureau of Investigation (FBI) has investigative jurisdiction. The Senior Security Official should immediately notify the local FBI office when an incident occurs.

### **5.6.1 NASA LaRC Fire Chief**

The NASA LaRC Fire Chief will immediately proceed to the site of the emergency and assume control and direction of all rescue operations. The Fire Chief will institute actions as necessary to minimize hazards to all personnel and limit damage to property and the environment.

### **5.6.2 Emergency Preparedness Officer**

The EPO will take charge of the Emergency Operations Center (EOC) and provide guidance to execute in an orderly fashion those actions required to provide prompt and effective means to minimize further injury and damage.

### **5.6.3 Director, Office of Safety and Mission Assurance**

The Director, OSMA, will direct the execution of this Chapter as the situation warrants or as directed by the Center Director.

### **5.6.4 Facilities Utilities Manager**

Develop and maintain procedures to cut power to the presently established facility power blocks in the event that an individual facility cannot be isolated from the power grid.

### **5.6.5 Security Office**

Provide Security forces to control access to the scene of the disaster. Coordinate appropriate law enforcement assistance as required. Conduct investigations as warranted.

### **5.6.6 Office of the Chief Counsel**

As requested by the EPO, send legal representatives to the EOC to collect information to be used in the event of possible claims.

### **5.6.7 Head, Office of Public Affairs**

Proceed to the EOC to coordinate the release of information to the news media. No other individual shall be delegated the authority to issue statements to the press.

### **5.6.8 Head, Office of Human Resources**

Notify next of kin of personnel seriously injured or killed as a result of the incident.

### **5.6.9 Facility Coordinators**

The Facility Coordinator will report to the on-scene entry point and assist the incident commander with response activities.

### **5.6.10 Director, Office of Procurement**

The Procurement Officer will direct procurement of resources as required on an emergency basis.

## Chapter 6

### CIVIL DISTURBANCE OR BOMB THREATS

#### 6.1 GENERAL

This Chapter does not provide planned reactions to specific situations. It does provide guidelines and background information to aid in making rational decisions. Nothing stated or implied is intended to abridge the constitutionally protected rights of free speech and free assembly. (Ref. NPG 1620.1, "Security Procedures and Guidelines")

#### 6.2 CIVIL DISTURBANCES

##### 6.2.1 Assumptions

It is assumed that:

- a. Demonstrations and disorder will originate with groups external to the Center rather than by Center employees.
- b. Spontaneous assemblies are unlikely to occur without some advance indication. Mobs and rioting generally are the result of the coincidence of two conditions: a cause, real or imaginary, and the presence of an organizer.
- c. Demonstrating group organizers will select a cause that has some popular appeal to certain population elements. For example, the expenditure of funds for space activities presumed to be at the expense of social programs could generate an emotional climate leading to demonstration.
- d. Demonstrators will assemble outside the main gate. Initially they may only interfere with Center traffic, but in the absence of control, they could decide to march on Center facilities and occupy them.
- e. Demonstrations are more likely to occur when it is known that news coverage will be present. Occasions such as "Open House," visits by prominent people, particularly if they are controversial, or the failure of a space mission, could trigger an event.

##### 6.2.2 Responsibilities

The Security Office (SO) is responsible for the initial contact with the demonstrators and will provide the Head, OSEM with an initial situation briefing. The Head, OSEM shall be responsible for briefing the Center Director. The Center Director may elect to utilize a Protective Action Team (PACT) to manage the situation. If a PACT is activated, the Head, OSEM or his designee will assemble representatives from the LaRC

organizations listed below:

- Office of Chief Counsel
- Office of Safety and Mission Assurance
- Office of Human Resources
- Office of External Affairs
- Office of the Chief Information Officer (Photo Lab)

The Head, OSEM shall be the Center single point of contact for directing interface with the demonstrators and shall be responsible for and coordinate all activities associated with the demonstration. The Center Director will be kept fully informed at all times.

### **6.2.3 Execution**

#### **a. The SO**

- (1) Upon being notified that people are assembling near the perimeter or at LaRC gates, the SO shall make contact with the personnel and attempt to obtain the following:
  - (a) The purpose and objective of the assembly.
  - (b) The name of the organization sponsoring the assembly and the name of the apparent leader.
  - (c) Approximate number of people.
  - (d) The presence of equipment, weapons, clubs, and so forth.
  - (e) Evaluation of the mood of the assembly, that is, good, humored, surly, militant, and so forth.
- (2) Establish an Emergency Command Post to control all related activities.
- (3) Ensure adequate resources are available to confine the activities to outside LaRC and to secure the entire perimeter of LaRC.
- (4) Ensure security video surveillance is in place from a discrete location.
- (5) Ensure LAFB Security and other law enforcement activities have been notified and assistance requested as appropriate.
- (6) Provide an immediate notification and status briefing to NASA Headquarters Security with periodic updates as appropriate. A written incident report shall be provided to NASA HQ Security within 24 hours of



the conclusion of the incident that contains at least the following minimum information:

- (a) The apparent purpose of the demonstration.
- (b) The approximate number of persons involved.
- (c) Names and addresses of injured persons and extent of injuries, if known.
- (d) Estimate of any damages to LaRC facilities and, if possible, the time estimate for the restoration of normal operations.
- (e) Copies of any video recordings or pictures taken of the incident, if possible.

b. The Head, OSEM

- (1) Shall be responsible for briefing the Center Director or his designee. The briefing shall include recommendations for effectively confining and resolving the incident in a non-violent manner, if possible, that will assure the safety and security of LaRC personnel and property. The briefing shall address, as a minimum, the following:
  - (a) External resources that have been contacted and the status of any requests for assistance from these resources.
  - (b) A recommendation as to whether or not a Protective Action Team (PACT) should be utilized. Should a decision be made to utilize the PACT, representatives from the Office of Safety and Mission Assurance, the Office of Chief Counsel, the Office of Human resources, the Office of External Affairs and the Office of the Chief Information Officer (Photo Lab) (to obtain a video surveillance team that will provide documentation of the incident) shall be contacted and participate in the PACT implementation.
  - (c) Possible curtailment of Center activities during the incident.
- (2) As the PACT leader, the Head, OSEM or his designee, accompanied by team members, shall proceed to the demonstration location and, if feasible, talk to the leaders of the demonstrations to determine exactly what they want or propose to do. If unauthorized entry occurs the demonstrators will be directed to voluntarily depart from the facility. Violators of the directive may be apprehended, ordered to leave, and escorted off LaRC by security personnel. Complete and proper identification of violators, including photographs, must be accomplished

prior to exiting the facility. Violators who reenter LaRC, after having been removed or having been previously ordered to leave LaRC may be prosecuted. Should prosecution be contemplated, civil law enforcement personnel will be requested to arrest and charge the individuals with criminal trespass upon Government property.

## **6.3 BOMB THREATS**

### **6.3.1 Assumptions**

- a. The concealed explosive device or bomb has been a favorite weapon of underground and terrorist groups. This fact has been illustrated in the past in various parts of the country in which growing social and political unrest has manifested itself in the form of bombings. There is no direct relationship between the incidents of actual bombings and the number of bomb threats reported.
- b. The use of the bomb threat as a vehicle for causing costly disruption of normal operations has been widespread and, from the standpoint of detection, is almost foolproof. It is improbable that a threatening message concerning a bomb placement in one of our facilities can be distinguished from that of a hoax, therefore, all bomb threats must be considered seriously.
- c. Under special circumstances, the public is allowed access to certain grounds, entrances, lobbies, foyers, corridors, and auditoriums when used for public meetings. By restricting unofficial visitors to these areas, it will greatly reduce the area for deposit and/or search for a bomb. Other areas are restricted because they are work areas or because of safety or security considerations. Employees working throughout LaRC facilities shall be attentive to unidentified strangers and shall assist them by guiding or directing them to the proper person or place.
- d. The primary concern of a bomb threat is human life. Whenever a specific facility is reported to be a repository of a bomb, the undebated policy shall be to evacuate the facility of its occupants immediately and relocate them in another facility. The Security Officer may elect to evacuate adjacent facilities. To reduce evacuation time, the fire alarm will be activated and occupants evacuated in the same manner as a practice fire drill. Whenever a facility is evacuated of its occupants because of a bomb threat, the facility utilities shall be shut down to the same extent as in a fire drill. Elevators will be shut down only after the evacuation of the disabled.
- e. The actual search to be conducted will be dependent on the facts as known. Thus the search procedures will vary depending on the information received in the threat call; that is, the time available for search, the amount of information available regarding the location of the explosive device, and any

other available information. Based on the facts of a specific threat, it may be wise to adjust the order of this plan. It is also important to remain flexible, if possible, in implementing this plan.

### **6.3.2 Execution**

- a. Persons Receiving a Bomb Threat or Discovering a Suspected Bomb shall:
  - (1) Immediately contact the EDO at LaRC extension 911. The employee shall attempt to remain calm so they may accurately report all pertinent information to the EDO.
  - (2) If possible, the "BOMB THREAT INSTRUCTIONS" located inside the last page of the LaRC telephone directory and in Annex I, Enclosure 3 of this document, shall be utilized to assist the person receiving the bomb threat to gather all available data
- b. The EDO, upon receiving notification of a bomb threat, will:
  - (1) Request the person reporting the bomb threat to activate the Fire Alarm pull station in the affected facility or to attempt to evacuate personnel from the threatened facility by any means possible. The caller will also be asked to ensure that personnel evacuating the facility to proceed a minimum of 500 feet from the facility. Further, the caller will be requested to remain in the area and contact security personnel upon their arrival to assist in the evacuation of the threatened area.
  - (2) Dispatch all available Security Officers to ensure the facility is being evacuated. If the evacuation is not in progress, instruct the Security Officers to activate the Fire Alarm system and to assist in the evacuation and establish a traffic and essential personnel security control perimeter of not less than 300 feet around the threatened area and an outer perimeter to control all other personnel and traffic at least 500 feet from the threatened area. Instruct Security Officer to refrain from operating ALL radios and cellular phones within the 500-foot perimeter and to instruct all responding personnel of this restriction.
  - (3) Notify the LAFB Security Police to request an explosive detection dog and/or the assistance of the Explosive Ordnance Disposal (EOD) Team, as necessary.
  - (4) Dispatch the Ambulance and medical response personnel.
  - (5) Activate the Emergency Response Team members, as applicable, via the EDO pager notification system.

- (6) Notify the Office of Inspector General and the LaRC Duty Officer.
- (7) Notify the Office of Public Affairs and request that all media be excluded from the incident scene.
- (8) Notify all perimeter gates to deny entry to all media vehicles and personnel. Requests for entry by media will be referred to Office of External Affairs.
- (9) Ensure all essential personnel are kept fully informed of significant events.
- (10) Dispatch security personnel to keep a video record of the incident for future analysis. Instruct persons operating video equipment to photograph the incident scene and to the extent possible all personnel in the immediate area.
- (11) Contact LaRC OCIO photographic and video personnel to relieve security personnel in the video documentation of the incident.
- (12) Request they record the incident and all personnel in the immediate area.
- (13) Should detonation occur, immediately:
  - Dispatch the LaRC Fire Department and other fire and medical resources as needed (LAFB, City of Hampton, etc.).

c. On-Scene Security Officer

The ranking or designated on-scene Security Officer, upon arrival at the affected area, shall:

- (1) Complete the evacuation of all persons from the affected facility and direct the evacuated personnel to the LaRC cafeteria located in Facility 1213 for incidents in the LaRC West area or to a designated safe area on the LaRC east area.
- (2) Contact the Facility Coordinator or alternate on the evacuation status of all personnel from the facility and the operating conditions and status of the facility systems (that is, electrical utilities, air handlers, pressurized systems, liquid or gas storage, toxic chemicals, or gases). Consider possible hazard to adjacent facilities and occupants and evacuate them in the same manner as considered appropriate.
- (3) Ensure the establishment of a security perimeter for traffic and essential personnel control of not less than 300 feet around the threatened area

and an outer perimeter to control all other personnel and traffic at least 500 feet from the threatened area.

- (4) Activate an on-scene Emergency Command Post.
- (5) If location of the explosive device is known, ensure all personnel and search teams immediately evacuate the facility. Only LAFB EOD Team members will enter the facility to disarm and/or remove an explosive device.
- (6) If a bomb or device is found, a complete search of the facility shall be conducted to assure that a second bomb or device was not planted. If no bomb is found, or if found and removed, and no additional bomb is discovered, the facility will remain evacuated until the Head, OSEM declares the area safe. The facility will be returned to the control of the person responsible for the area, and may be occupied.
- (7) Assist all responding personnel, to the extent possible, with all security-related requests.

d. SO, upon notification of a bomb threat or explosion, shall:

- (1) Notify the Head, OSEM of the incident.
- (2) Ensure a representative reports to the command post.
- (3) Ensure adequate resources are available or have been requested to provide an adequate response.
- (4) Provide an immediate notification and status briefing to NASA Headquarters (HQ) Security with periodic updates, as appropriate. A written incident report shall be provided to NASA HQ Security within 24 hours after resolution of the incident.
- (5) Proceed to scene and provide oversight and, if required, direction of all security related actions and liaison between LaRC Security and other responding security or law enforcement agencies.

e. Head, OSEM, upon notification of a bomb threat or explosion, shall:

- (1) Ensure the Center Director receives an immediate briefing and required subsequent updates of significant events.
- (2) Determine when the threatened area may be declared as a "safe" area.

**Continue to Next Section**